

FIGURE 1

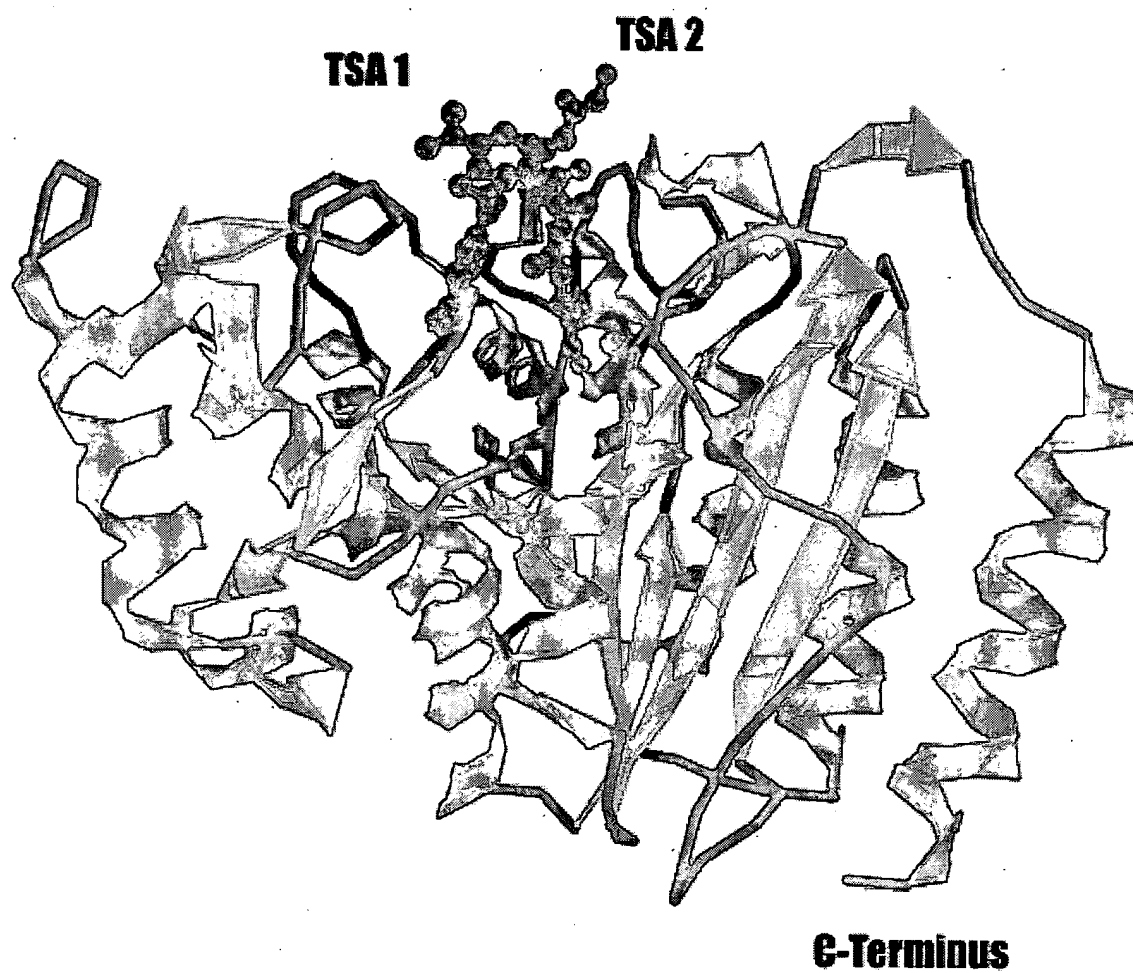


FIGURE 2A

Examples of R₁ and R₂ Substituents

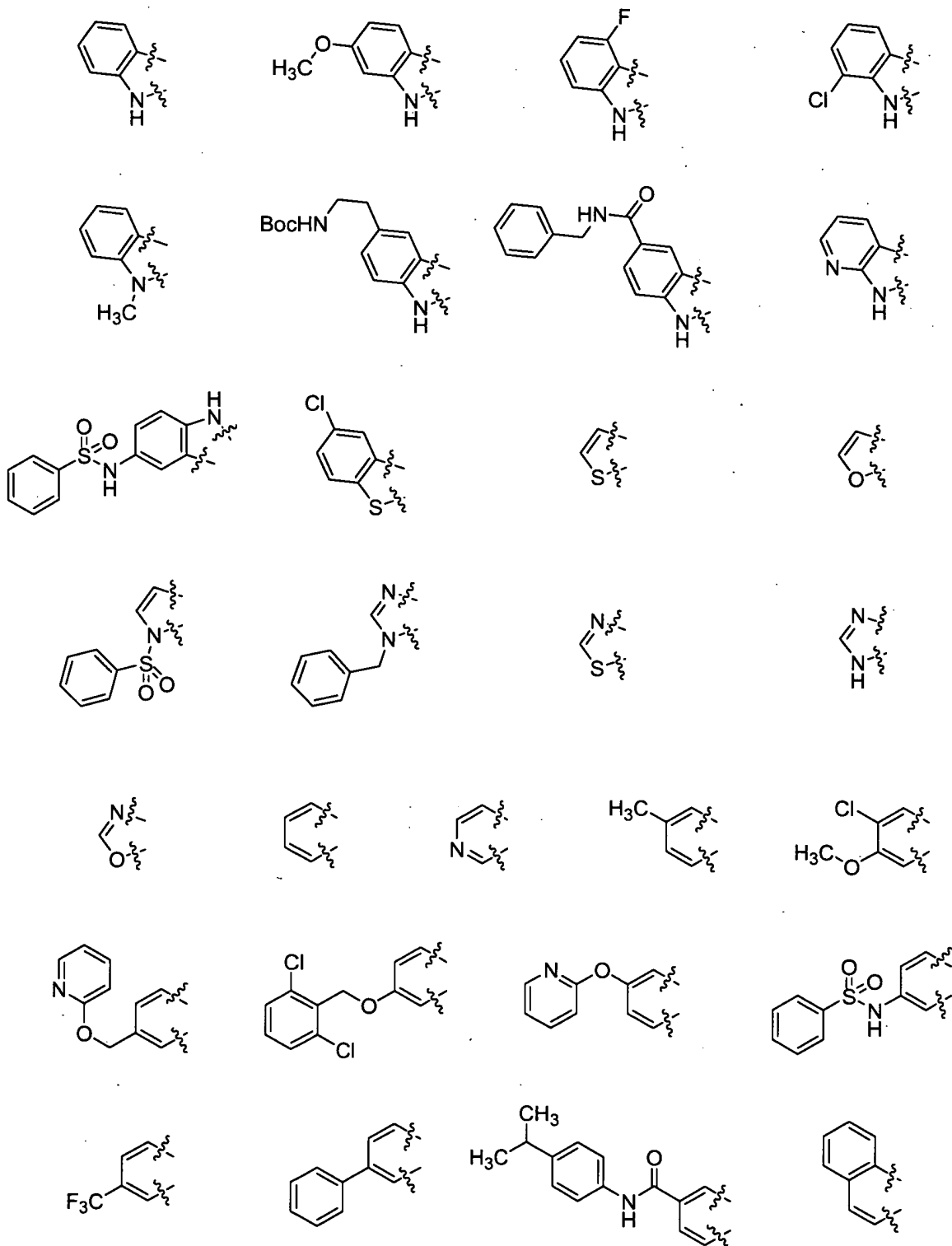


FIGURE 2A (cont.)

Examples of R₃ and R₄ Substituents

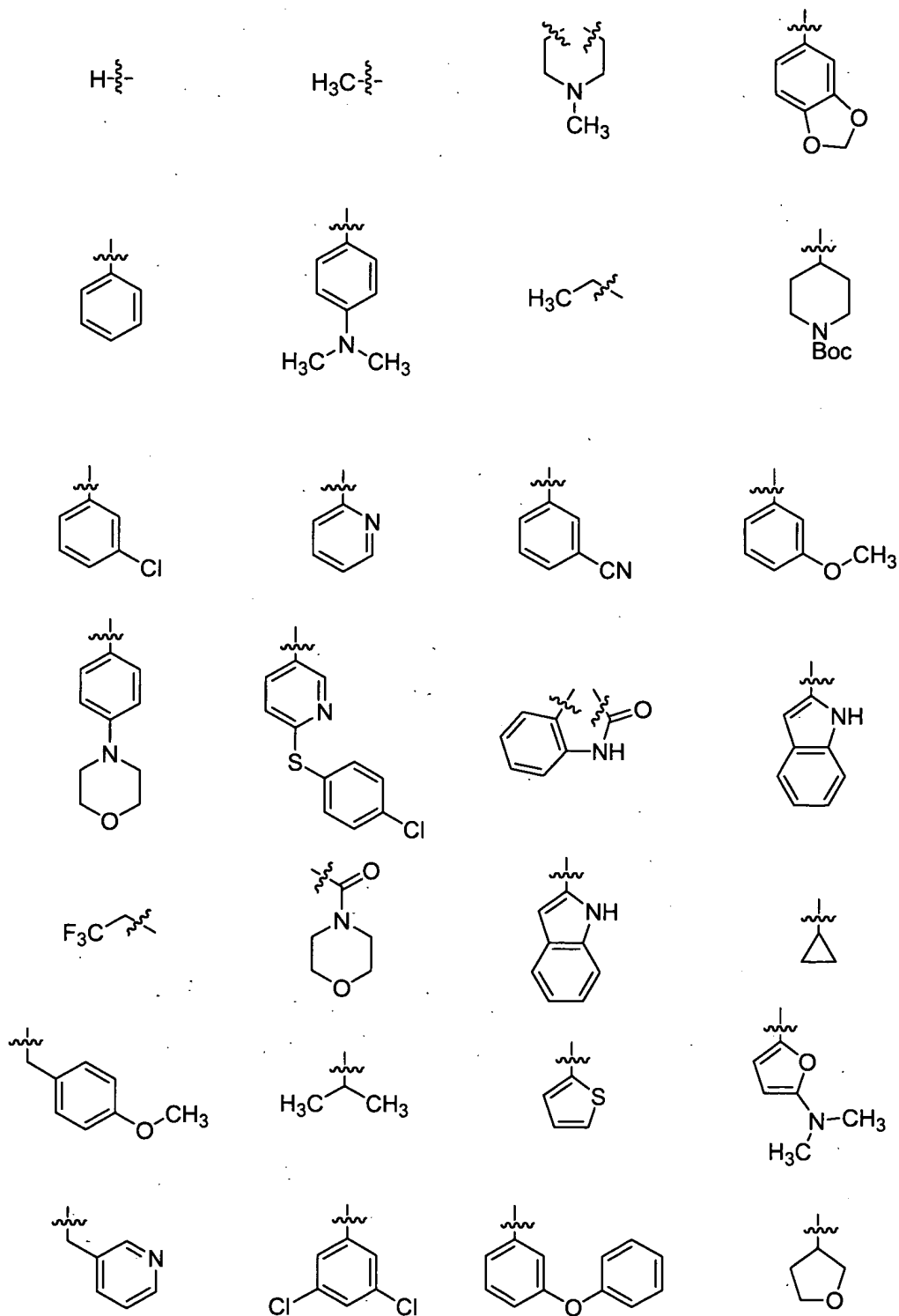


FIGURE 2A (cont.)

Examples of R₅ Substituents

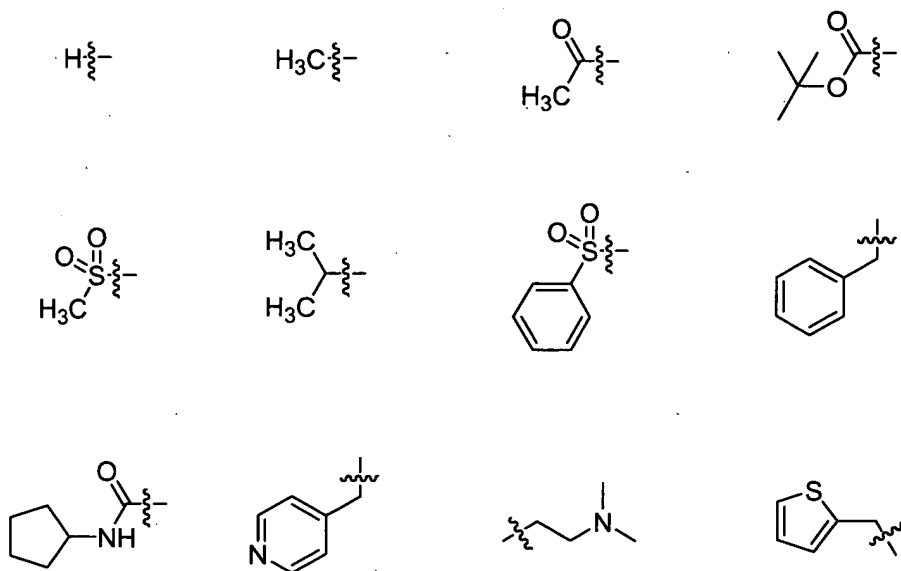


FIGURE 2B

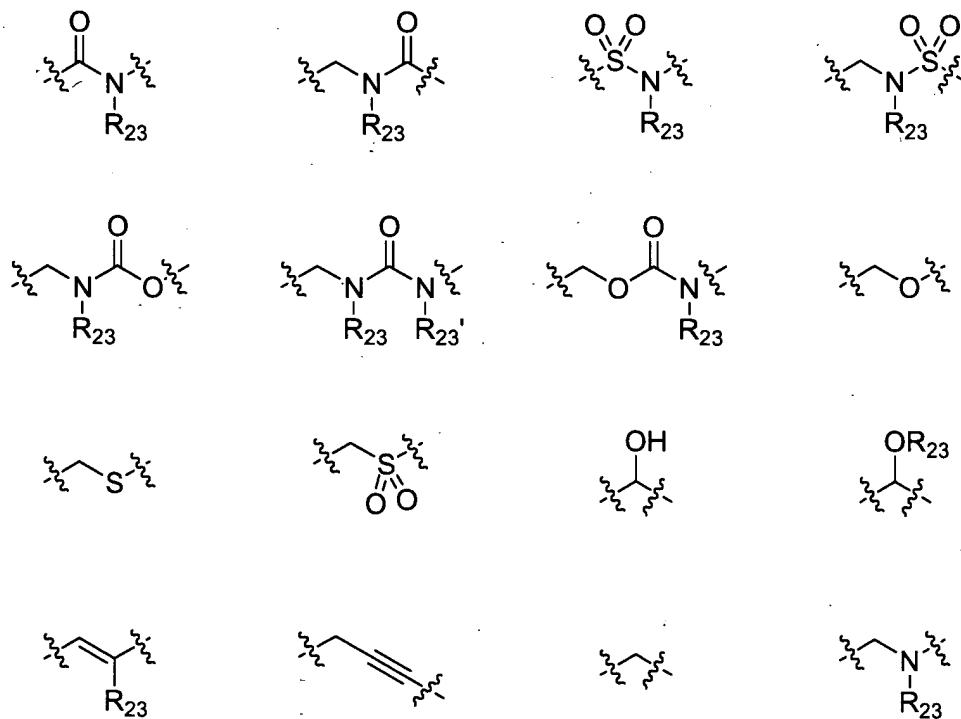


FIGURE 2C

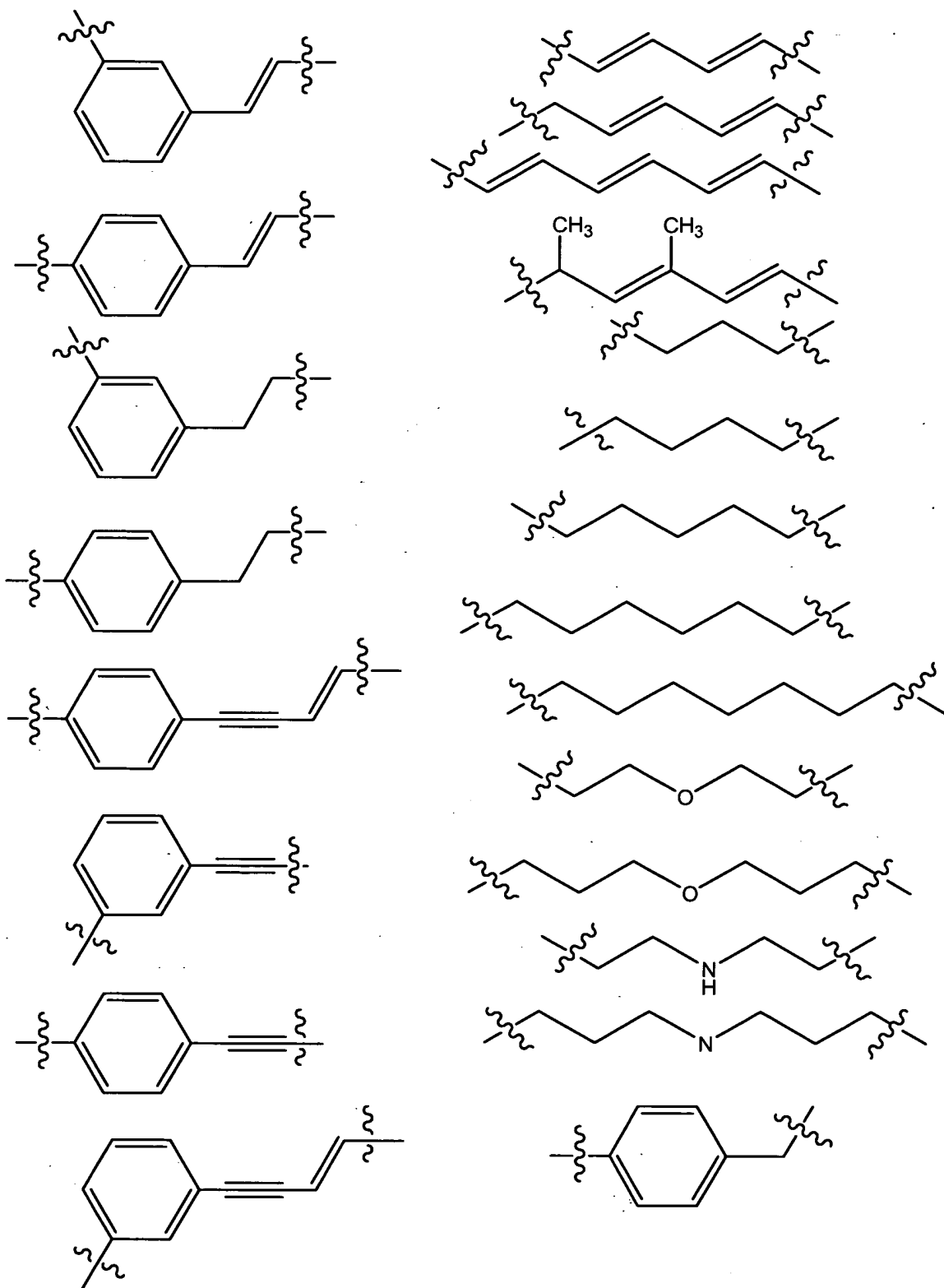


FIGURE 2C (cont.)

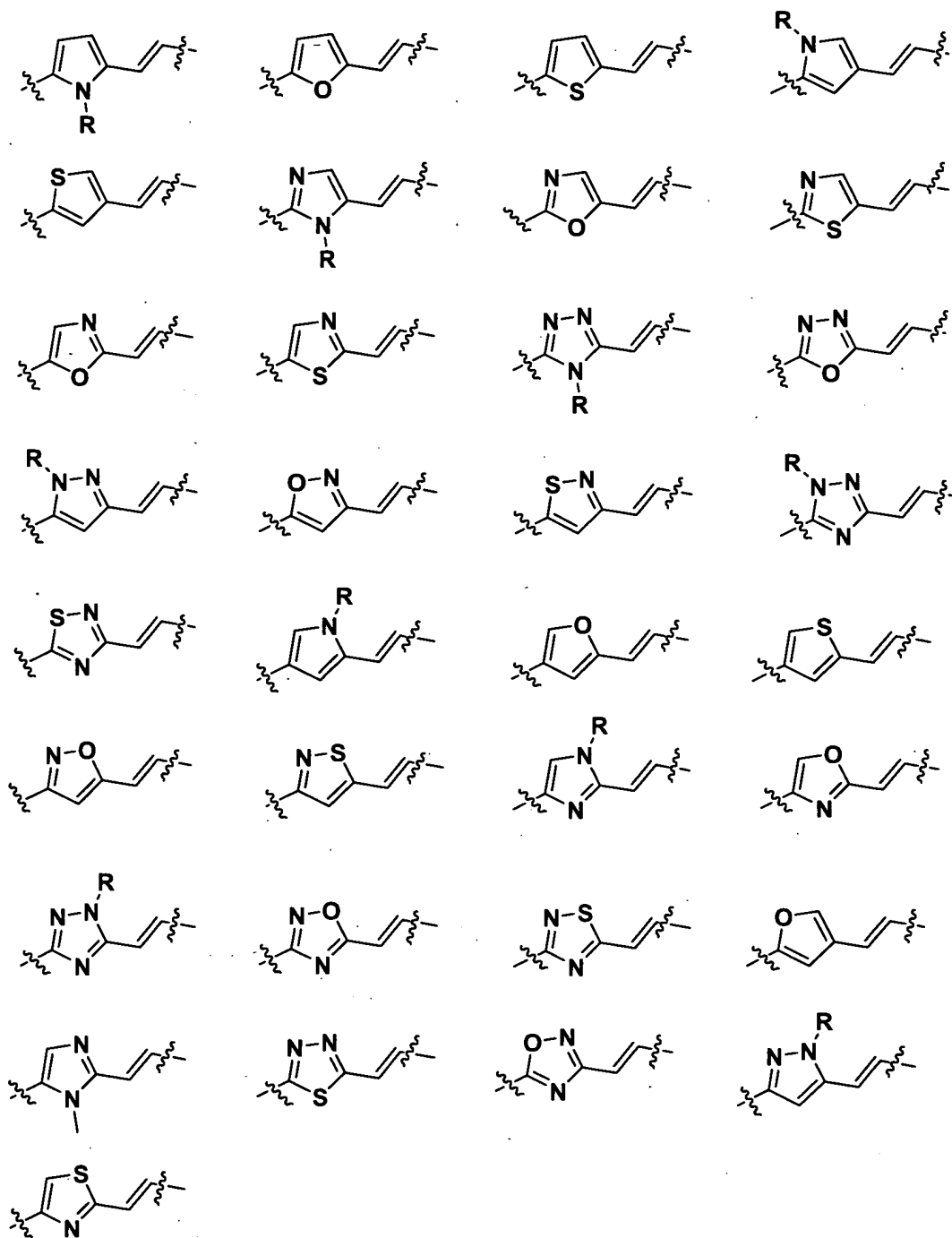


FIGURE 2C (cont.)

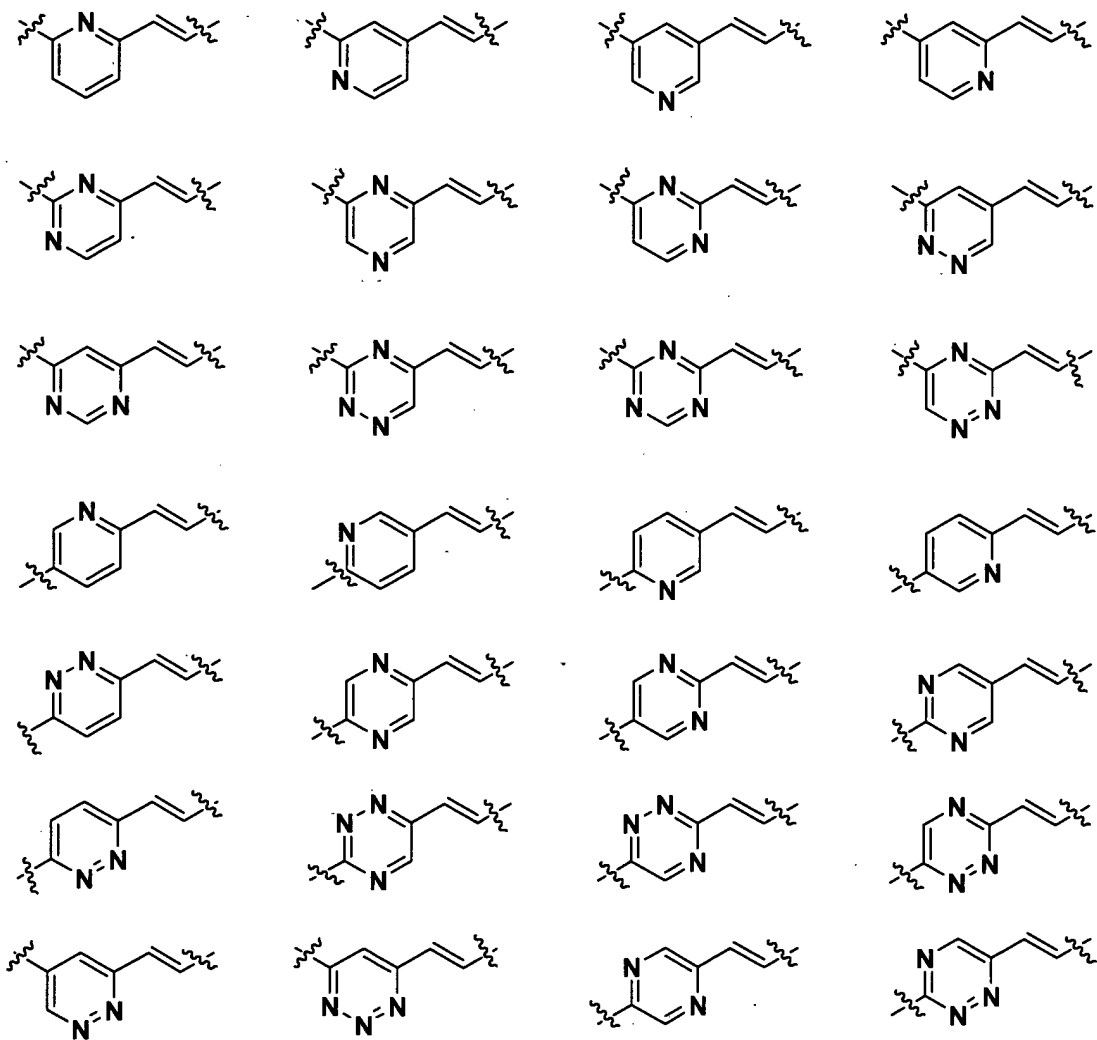


FIGURE 2D

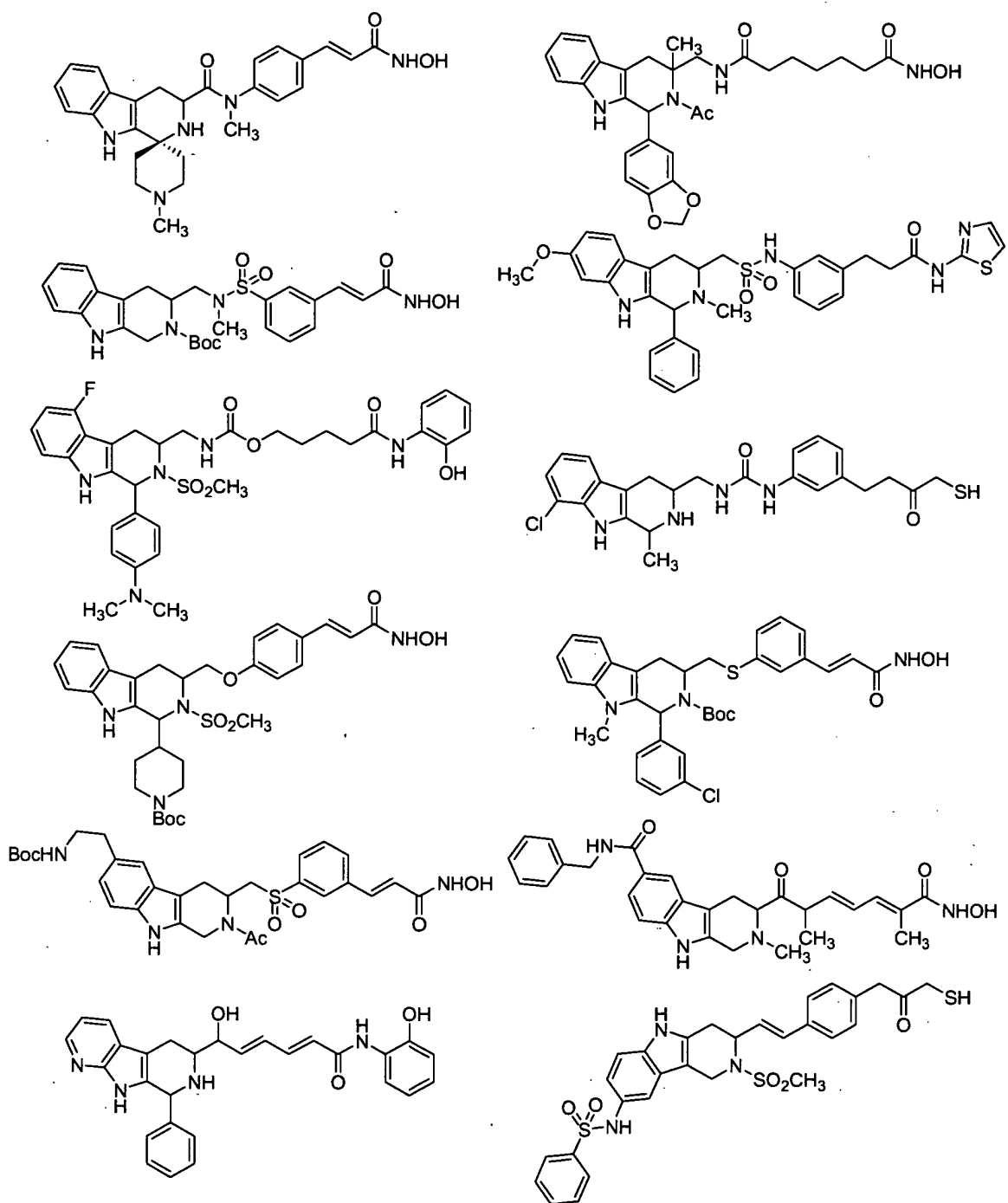


FIGURE 2D (cont.)

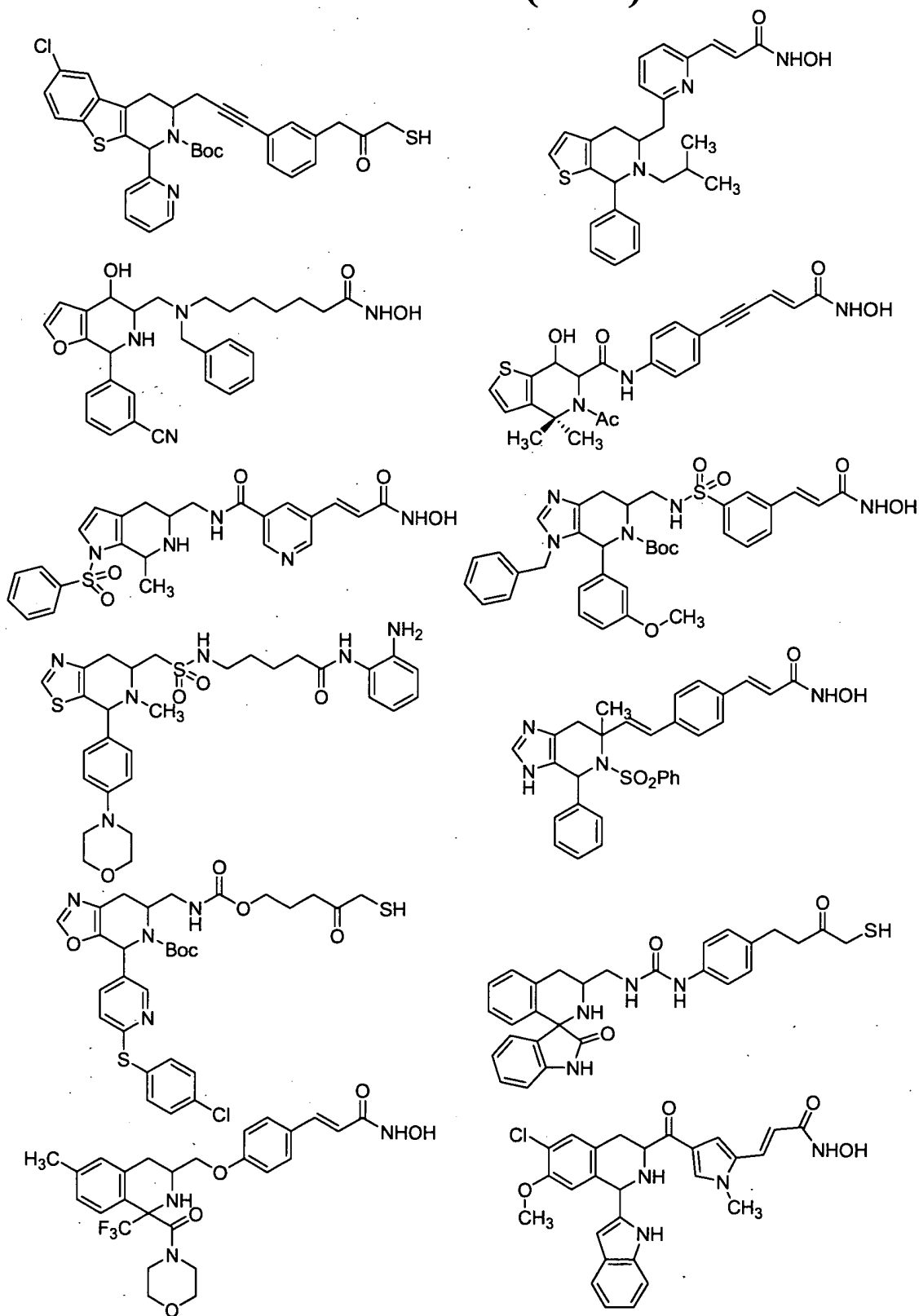


FIGURE 2D (cont.)

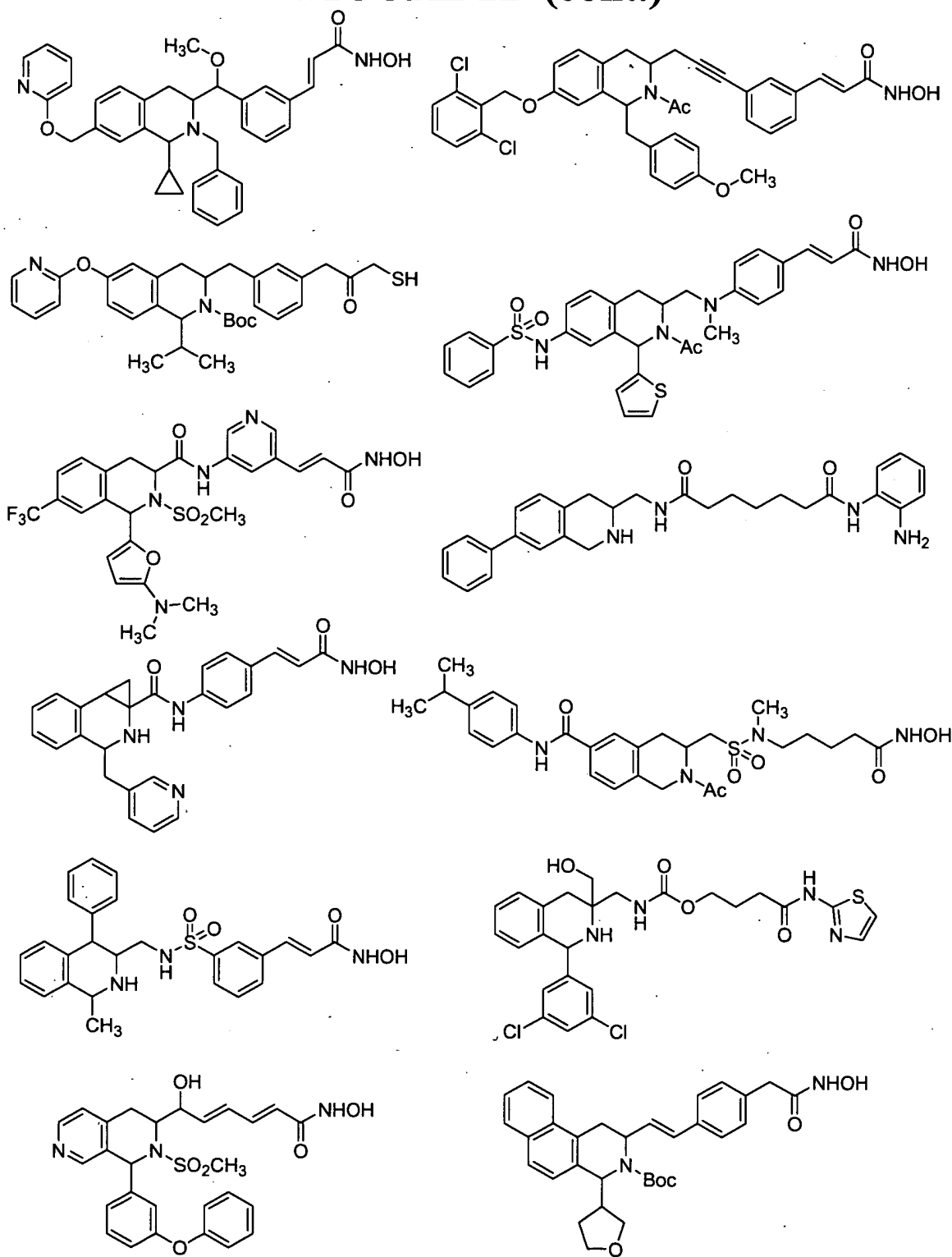


FIGURE 3

Amino acid sequence for full length human wild type HDAC8 [SEQ. ID No. 1]

MEEPEEPADSGQSLVPVYIYSPEYVSMCDLAKIPKRASMVHSLIEAYALHKQMRIVKPK 60
VASMEEMATFHTDAYLQHLQKVSQEGDDHDPDSIEYGLGYDCPATEGIFDYAAAIGGATI 120
TAAQCLIDGMCKVAINWSGGWHHAKKDEASGFCYLNDVGLGILRLRRKFERILYVDLDLH 180
HGDGVEDAFSFTSKVMTVSLHKFSPGFFPGTGDVSDVGLGKGWYYSVNVPIQDGIQDEKY 240
YQICESVLKEVYQAFNPKAVVLQLGADTIAGDPMCSFNMTVPVGIGKCLKYILQWQLATLI 300
LGGGGYNLANTARCWTYLTGVILGKTLSSSEIPDHEFFTAYGPDYVLEITPSCRPDNRNEPH 360
RIQQILNLIKGNLKHVV 377

Human cDNA sequence HDAC8 [SEQ. ID No. 2]

ATGGAGGAGCCGGAGGAACCGGCGGACAGTGGGCAGTCGCTGGTCCCGGTTTATATCTAT 60
AGTCCCAGATATGTCTAGTATGTGTGACTCCCTGGCCAAGATCCCCAAACGGGCCAGTATG 120
GTGCATTCTTTGATTGAAGCATATGCACTGCATAAGCAGATGAGGATAGTTAAGCCTAAA 180
GTGGCCTCCATGGAGGAGATGGCCACCTTCCACACTGATGCTTATCTGCAGCATCTCCAG 240
AAGGTCAGCCAAGAGGGCGATGATGATCATCCGGACTCCATAGAATATGGGCTAGGTTAT 300
GACTGCCCAGCCACTGAAGGGATATTTGACTATGCAGCAGCTATAGGAGGGGCTACGATC 360
ACAGCTGCCCAATGCCTGATTGACGGAATGTGCAAAGTAGCAATTAAC TGGTCTGGAGGG 420
TGGCATCATGCAAAGAAAGATGAAGCATCTGGTTTTTGTATCTCAATGATGCTGTCCTG 480
GGAATATTACGATTGCGACGGAAATTTGAGCGTATTCTCTACGTGGATTTGGATCTGCAC 540
CATGGAGATGGTGTAGAAGACGCATTCAGTTTCACCTCCAAAGTCATGACCGTGTCCCTG 600
CACAAATTCTCCCCAGGATTTTTCAGGAACAGGTGACGTGTCTGATGTTGGCCTAGGG 660
AAGGGATGGTACTACAGTGTAATGTGCCCATTCAGGATGGCATAACAAGATGAAAAATAT 720
TACCAGATCTGTGAAAGCGTACTAAAGGAAGTATACCAAGCCTTTAATCCCAAAGCAGTG 780
GTCTTACAGCTGGGAGCTGACACAATAGCTGGGGATCCCATGTGCTCCTTTAACATGACT 840
CCAGTGGGAATTGGCAAGTGTCTTAAGTACATCCTTCAATGGCAGTTGGCAACACTCATT 900
TTGGGAGGAGGAGGCTATAACCTTGCCAACACGGCTCGATGCTGGACATACTTGACCGGG 960
GTCATCCTAGGGAAAACACTATCCTCTGAGATCCCAGATCATGAGTTTTTCACAGCATAT 1020
GGTCCTGATTATGTGCTGGAAATCACGCCAAGCTGCCGGCCAGACCGCAATGAGCCCCAC 1080
CGAATCCAACAAATCCTCAACTACATCAAAGGGAATCTGAAGCATGTGGTCTAG 1134

FIGURE 4

Amino acid sequence for residues 1-377 of HDAC8 with a cleavable N-terminal

6x-histidine tag [SEQ. ID No. 3]

(6x-histidine tag underlined)

MHHHHHHPMEEPEEPADSGQSLVPVYIYSPEYVSMCDLAKIPKRASMVHSLIEAYALHK 60
QMRIVKPKVASMEEMAAFHFTDAYLQHLQKVSQEGDDHDPDSIEYGLGYDCPATEGIFDYA 120
AAIGGATITAAQCLIDGMCKVAINWSGGWHHAKKDEASGFCYLNDVGLGILRLRRKFERI 180
LYVDLDLHHGDGVEDAFSFTSKVMTVSLHKFSPGFFPGTGDVSDVGLGKGRYYSVNVPIQ 240
DGIQDEKYYYQICESVLKEVYQAFNPKAVVLQLGADTIAGDPMCSFNMTVPVGIGKCLKYIL 300
QWQLATLILGGGGYNLANTARCWTYLTGVILGKTLSSSEIPDHEFFTAYGPDYVLEITPSC 360
RPDRNEPHRIQQILNLIKGNLKHVV 385

FIGURE 5

